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CLEMENT HOLLINSHED.

Or my friends, there is none for whom I bear greater respect than a certain worthy old gentleman, to whom I am distantly related, and who, in his turn, regards me with so much affection, that he is likely, I have been told, to consider me in his will. Clement Hollinshed, Esq. as this excellent person is usually designated, possesses a competency acquired in a dignified profession, and now chiefly spends his time in lettered leisure, and in performing acts of beneficence. No heart could be kinder, no understanding more clear upon the most of topics, than his. He has also a prismatic fancy, which breaks up every intellectual ray into many shades of rich and varied colouring, and renders his conversation as agreeable as the finest of set entertainments. Unfortunately, this mind, so good in its original constitution, and so improved by culture, has what a geologist would call a hitch or dyke, which tends in a great degree to baffle those who would enjoy it. Mr Hollinshed is afflicted with a nervous antipathy to all those features of the passing age, which bear the name of improvements, and, after an hour of rational conversation, will fall into the fidgets if he but hears allusion made to a steam-engine. It is not that he has convinced himself of any disadvantage to the commonwealth in these matters—it is not that he has ever personally experienced the least annoyance or injury in consequence of them. If taken to task upon the subject, he would perhaps be unable to advance a single reasonable objection to any one of the novelties which he so much dislikes: he would only "know full well" that he could not endure them.

To me this peculiarity of Mr Hollinshed is a subject of frequent, and, I sometimes fear, not altogether innocent amusement. To watch its manifestations, and even occasionally to provoke them, yield me a pleasure not unlike that of a naturalist in studying and practising on some extraordinary malformation. Let it not be supposed that my friend has a habit of openly railing at improvements. He knows that this would only expose him to the equally open ridicule of almost all his acquaintance. His feelings are usually shown only by a disrelish for the subject when it is introduced, or at the most by a few sly, very sly sarcasms, which he will now and then, at fitting opportunities, let fly at any particular improvement which may be under notice. Fully acquainted with these peculiarities, I never deem it necessary, for bringing him out, to do more than allude to those matters which are so apt to discompose him. The word steam is as effectual for setting him a-boiling, as if a minute description were given of Perkins's Pacificator. Gas is next in chief of his antipathies. He not only persists in candles and oil in his own house, but, I seriously believe, has a dislike to going abroad at night, on account of the debt which he then involuntarily incurs to carburetted hydrogen. Whenever, then, I feel inclined to persecute him a little, I have only to make reference to gas, gas-lights, gas-companies, gas-manufactories, any thing of or belonging to gas. He then kindles in a moment, like an argand burner at the touch of flame. After having made this a subject of amusement for a good many years, I lately mentioned, within his hearing, that a new and cheaper way of producing gas was expected to be immediately brought into practice, by disengaging the hydrogen from common water, so that the inhabitants of any town blessed with a good river would probably in no long time find it both fuel and water. "Yes," said the improvement-hater, "they'll set the Thames on fire at last." I must confess that his wit rather turned the tables upon me on this occasion, and I could see that the old gentleman

even seemed to enjoy the intelligence—partly, perhaps, as it promised to set one improvement in mortal conflict with another. But it was not difficult, by expatiating a little upon the merits and utilities of the invention, to dash his joy. On my stating that not a householder of any kind in any town of considerable size would now want both cheap light and cheap firing, and that coal-pits would in time be visited as antique curiosities, like old abbeys and castles, he looked at his watch, and, muttering something about the lateness of the hour, bade the party good night.

The next time we met, another considerable company chanced to be present, and the conversation, without any interference on my part, turned upon railways. The moment the subject was mentioned, I cast a glance towards my worthy friend, and perceived his countenance fall. More than one individual spoke eloquently of the great commercial advantages which might be expected from railways, and the extreme facility which they would introduce into travelling. "Why," said I, keeping my eye upon the sufferer, "it is by no means unlikely that people will yet breakfast in London and dine in Edinburgh. We shall have merchants residing in one city, which they delight in for its elegant society, and daily attending places of business in cities a hundred miles off, which they appreciate for commercial reasons: No need to suffer the smoke of manufactories then. They will go from Bath or Cheltenham to Manchester in the morning, and return at night." "That is all very well," said Mr Hollinshed in his hard suppressed manner; "but still railways and locomotive engines are not the perfection of travelling. I cannot rest satisfied with any system which involves either time or fatigue. We must yet have offices in our principal towns, where, on mentioning the name of the place to which we are going, and paying the proper fare, we shall be requested only to walk into something like a shower-bath, and, on pulling a string, and holding our breath for three or four seconds, we shall be set down safe and pleasantly in the corresponding office at the town aforesaid." After a hearty laugh at this sally, which seemed to smooth a little the ruffled down of the old gentleman, I coolly remarked that the plan of which he had given the leading features might perhaps be realised ere long. "The impossibilities of one age," I observed, "were the possibilities of the next." Steam-vessels had been as much laughed at as the Patent Instantaneous Safety Conductors, as we shall call them. Gas-light had more recently been not less ridiculed. Travelling thirty miles an hour had been ridiculed, and yet it was performed upon the Liverpool and Manchester railway. Nay, Dr Lardner has declared, that, upon the railway between London and Liverpool, expresses will proceed at the rate of fifty miles an hour, and that a hundred miles are within the limits of mechanical probability." And thus I went on with one agonising allusion after another, till, as usual, my excellent friend seemed inclined to leave us, when, for the sake of his delightful society, I changed the conversation.

I have sometimes set myself to observe if Hollinshed does not, under all his apparent dislike of improvements, secretly relish the advantages which flow from them. His fortune is not inconsiderable; but as he is fond of giving away, it might be supposed that he would be glad to save, if it were only for the purpose of enlarging his benefactions. Still I am bound to say, that, to the best of my apprehension, he likes not the economy of improvement any more than what he calls the cant of its admirers. Cheapness is, indeed, one of the few features of the age upon which he con-

* To this it might have been added, that the "follies" of one age are often the wisdom of another.

siders himself at liberty to declaim. He conceives himself to be here sheltered by the wisdom of certain unrepented proverbs, which identify lowness of price with inferiority of quality, and are of course inapplicable to the kind of cheapness which lowers price only. Little inclined, in matters which affect his besetting prejudice, to look into distinctions, he confounds the cheapness of improvement with the cheapness of worthlessness, and, what with sneers, sarcasms, and open abuse, contrives on this point to make a stout fight, so as in some measure to compensate to himself for what he suffers on other occasions. In his own household economy, he shows a decided preference for dear things, especially if they be dear through a comparison with things which have been cheapened by new-fangled modes of production. Whenever a tradesman begins to advertise cheap goods, whenever the price of a publication is reduced "to suit the demands of the age," my friend immediately ceases to patronise either the one or the other. Like Swift, when Pope and Gay came to him *dined*, he is determined not to save any thing by them. He won't be enriched by processes which he hates.

If my worthy friend can find no sympathy in his bosom for the results of successful physical science, he is not less evil-disposed to improvements of a moral kind. And here, from the less ascertained character of the most of those improvements, and the division of the public mind upon many of them, he finds much greater scope for both reasoning and ridicule. A laugh at temperance-societies, in which he seldom fails to be joined by a considerable portion of the company, quite puts him into heart. The dolor he has endured in hearing of the success of a railway, is banished in an instant, when he gets a good hit planted in the sides of an infant-school, or a society for diffusing knowledge among the people. The most whimsical of his freaks is his hostility to all improved kinds and modes of education. It is well known that, while the old system remained untouched and unthreatened, he made no scruple of expressing his disapprobation of it, relating, with something like horror, his recollections of the dreadful penalties inflicted upon his own person for failing to understand what no child could understand without explanation, and what, after all, was not worthy of being understood. No sooner—to use one of his favourite phrases—did the cant of the age find its way into the domains of the ferula, than my uncle changed his tune entirely. Exercises, of which he had professed himself still unable to perceive the meaning, began to appear to him as the only effective means of training the juvenile faculties. Monitorial plans, and intellectual plans, plans of moral training, and indeed every kind of novelty which had been introduced into education, fell under his contempt. He almost appeared to have canonised in his own mind those straps and other extinct appliances, which he had formerly denounced as the instruments of an unreflecting tyranny. Being here sure of support from a considerable portion of every common audience, he did not fail to express his sentiments on these subjects, and thereby revenge himself for many an improvement which he had to put up with in silence. He would grow quite jocular upon academies conducted without rewards and punishments, and wonder when the time would come for schoolboys holding councils of war upon peccant masters—then called masters no longer—and passing resolutions against the length of versions, and the learning of rules by heart. The slumping plan was here of great service. He seemed to consider the "no royal road to geometry" as a sufficient rebuke for every improvement in education, whether the im-

provement referred to a means of facilitating instruction, or a mode of strengthening the moral sentiments. He would undertake to answer no specialty. Whatever he could not distinctly refute, he would allow to pass, till, something being mentioned which allowed of civil or sarcasm, he would "ride off" upon that at the gallop, and be instantly beyond pursuit.

Such are the principal things which excite the peculiar phobia of my venerable friend. For a disease so extraordinary, it seems at first impossible to account; and I should certainly despair of hitting upon even a plausible conjecture, if I did not know how often we are governed by sentiment when we think we are acting by reflection. Mr Hollinshed is much under the influence of an affection for the past. The rude doings of his ancestors elicit more tenderness from his nature, than the most noble efforts of contemporary benevolence. He can more easily pardon the massacre of St Bartholomew, than a scheme for civilising the heathen. In judging the question between candles and gas, he probably considers how much good mirth and festivity have been enjoyed in the old time by the former light: he turns to gas, and finds no such associations in connection with it: of course, the decision is for long sizes. And so forth with all other things. I do not doubt that, in judging of railways, he is not without some tender recollections of the gallant highwaymen—the predatory cavaliers—who used to give such a romantic interest to travelling, and partly condemns locomotive carriages because they have made "stand and deliver" so like a physical impossibility. Whatever be the source of the disease, it is one which entitles my friend to some degree of pity, seeing that it exposes him to almost incessant annoyance. Wherever he goes, whatever he reads, in whatever company he may be, he cannot for many minutes at a time escape a shock from the spirit of the age. He particularly complains of the newspapers, and, after many shiftings, declares it is impossible now to obtain one of the good old sort. I occasionally amuse myself by watching him as he reads one of these sheets. Twice after twice passes over his countenance, as his eye falls upon the various paragraphs which tell of new discoveries in science, of improvements in the social economy of the people, of lectures for the instruction of the working-classes, new railways, gas-companies, and plans for extended steam communication. One day, observing him give a twist of extraordinary agony, I carefully inspected the paper when he had done with it, and satisfied myself that the cause of his sufferings lay in a notice of about five lines, which stated that the sheriff of — had got white gloves on account of a bloodless assizes. On another occasion, I accounted for a very hard cough by a statement of the increase of cotton-factories in Ireland. I have traced a sigh to the falling off of cock-fighting, and a nervous shuffle of the feet to a remark upon the propriety of giving up drinking at funerals.

And now the reader will be inclined to put to me the question—a very natural one, I must own—if I have not considered the danger to which this paper may expose my expected legacy. This matter, I can assure him, has been carefully enough considered, and I am glad to say that I feel quite safe. My kinsman was, I believe, a subscriber to the *Mirror and Lounger*, which appeared at the same price with the present sheet. But then those papers gave nothing for the money but a single folio leaf, while the present publication gives about a third of a volume. He has of course from the first set himself against taking a pennyworth so extremely tempting, and even abstained from looking at it. I need not therefore remark, that my good friend might here be made a subject of remark every week, without his ever knowing any thing of the matter.

PROGNOSTICS.

THE subject of prognostics of the state of the weather has ever been one of considerable interest. In all ages and in all countries this department of natural science (for such, indeed, it may be termed) has ever possessed enthusiastic cultivators. Nor have their researches been limited to one department of the universe alone, but each and all have contributed their share, to increase the growing stock of information. The airy mist that floats aloft, hurried at random by each passing breeze, and the sombre clouds, whose dark and heavy masses roll along in stern sublimity; the colours of the morning or the evening sky, sun, moon, and stars; all speak a clear and intelligible language to the attentive inquirer. The feathered creatures of the air, the wild inhabitants of the forest, and domestic cattle, the patient ministers to our enjoyments, each in its own peculiar way foretells the coming change. Nor is old ocean silent; his solemn moaning, and the restless heaving of his boiling surge, with the innumerable finny tribes that people his most secret caves, these lend their aid, and by certain signs portend the storm, or promise rest to the bewildered mariner.

The following is a short account of some principal facts which have been ascertained as denoting a change of weather, with the superstitions which have had their origin in meteorological phenomena:—

A red colour of the western sky, at sunset, especially when it has somewhat of a purple hue, is a sure sign of good weather. What says the old proverb?

An evening red, and a morning grey,
Are sure signs of a fine day;
Be the evening grey, and the morning red,
Put on your hat or you'll wet your head.

The red appearance probably depends upon the dryness of the air, which in this condition would seem to refract more red rays than ordinary. The grey morning, again, is produced by a number of lofty patches of that particular cloud to which meteorologists give the name of cirro-cumulus, one which has always been considered a favourable indication. Thus, among the many rules contained in our old almanacks, we find the following upon this subject.

If woolly fleeces strew the heavenly way,
Be sure no rain disturb the summer day.

On the contrary, that peculiar appearance of cloud to which the name of mare's tail is popularly applied, is often the first symptom of a change after a series of fine weather; and it may also be considered as a sign of wind, which not unfrequently blows from the quarter to which the fibrous tails have previously pointed.

When, in clear days, clouds are observed to form and disappear again in quick succession, we may anticipate a speedy termination of the fine weather; and the same may be expected when a number of heavy, wide extended clouds, or those which resemble mountains piled confusedly upon one another, make their appearance; and hence the old rhyme,

When clouds appear like rocks and towers,
The earth's refreshed by frequent showers.

The absence of vapour from the tops of lofty eminences, is a very favourable omen; while the contrary is almost an invariable prognostic of rain. Such is particularly the case with the Table Mountain at the Cape of Good Hope; an appearance of clouds upon its summit, which the sailors term the spreading of its table cloth, generally precedes one of those frequent storms which render the navigation off that coast so difficult and dangerous, and which for so many years arrested the progress of discovery.

The sun, moon, and stars, as they roll on their sublime course through the wide canopy of heaven, afford many useful and instructive signs. Perhaps one of the surest indications of approaching rain is the appearance of a halo round the sun or moon; and the fact admits of easy explanation. The halo, an extensive luminous ring including a circular area, the centre of which is occupied by the sun or moon, is dependent for its formation upon the intervention of a cloud between the luminous body and the earth; and the larger the circle, the nearer the cloud, and, consequently, the more ready to discharge its accumulated moisture. Sometimes, indeed, the halo appears in a sky where an inattentive observer can perceive little or no obscuration, but in those cases the phenomenon appears most probably to depend upon some diffused haziness. When, at the same time, the stars look dim, additional evidence is afforded, and the rain which falls under such circumstances is gentle, and of long continuance, and often extends over a large tract of country.

The clear silvery light of the moon augurs favourable weather, while she is paler before rain, and bears a red and angry look when winds are about to vent their fury. Changeable weather is also denoted when the edges of the sun or moon appear ragged and unequal, a phenomenon which most probably depends upon the existence of superabundant moisture in the air; and wind may be expected when stars are seen to shoot across the sky, this appearance being caused by light clouds passing along with great rapidity. Moist air refracts light more powerfully than dry; consequently, when distant hills appear closer than natural, rain may be expected. When a dense and uniform veil of cloud is spread over the sky, a frequent occurrence before rain, and when the air is undisturbed by wind, music and other sounds are frequently heard a great way off; a circumstance which has caused the far propagation of sound to be considered as a prognostic of rain. The sound of distant church bells in the country often serves this purpose. In connection with this subject, it may be mentioned, that noises are not unfrequently heard upon the sea-coast before the occurrence of a storm, and have given rise to some remarkable superstitions. We subjoin the following account of one which was prevalent at no very distant period in our own country. Rather more than half a century ago, the inhabitants of the west coast of England were appalled by the frequent occurrence of fearful moanings as of a person in torture; the sounds continued for some time, until they were at length drowned in the uproar of a storm, which invariably followed. The superstitious imaginations of the uncultured fishermen and sailors referred the groans to a traditionary spirit called Bucca, and ever afterwards considered it as ominous of a shipwreck. Palpably absurd as this idea was, the bodings were correct, and we are now able to offer an intelligible and satisfactory explanation of the occurrence. Sound, we know, travels much more rapidly than currents in the air; the fearful noises therefore bespoke the distant war of elements, and few storms happen on that iron-bound coast without a shipwreck to bear witness to their fury.

Thomson, whose accurate and extensive information upon all subjects connected with meteorology is evident throughout his writings, has well described the

same phenomenon, in his beautiful account of a storm:—

A boding silence reigns
Dread through the dim expanse; save the dull sound
That from the mountain, previous to the storm,
Rolls o'er the muttering earth, disturbs the flood,
And shakes the forest leaf without a breath.

These lines call to our recollection an omen of wind, which we have hitherto neglected to mention—it is that of light bodies being seen floating about in the air in various directions, while as yet even the feeblest breeze is unfelt. This circumstance may be explained by a reference to the tremors which a moving column of air must excite in the atmosphere, even at a considerable distance from its own track; it is therefore a very correct prognostic.

Many plants appear peculiarly susceptible of atmospheric influence, but the same causes produce different effects upon different individuals of the vegetable kingdom. Some rejoice in the genial warmth of the summer's sun, and expand their beauties to his glowing eyes, while others, more retired, court the shade, and only raise their modest heads when clouds obscure his brightness, and descending showers cool the parched and thirsty soil.

Chickweed is an excellent weather guide; when the flower expands freely, no rain will fall for many hours; and if it continue thus open, the prognostic will be still more favourable. When the flower appears half concealed, showers may be expected, and continued rain is indicated by its entire closure. If the flowers of the Siberian sow-thistle remain open all night, we may look for rain next day. The pimpernel is so remarkable for the regularity with which its petals close at the approach of wet weather, that it has obtained the popular name of the poor man's weather-glass. The trefoil, convolvulus, and many other plants, contract their leaves before showers.

It is from the animal kingdom, however, that we obtain the most numerous prognostics; but how these creatures become so acutely sensible of the approach of particular kinds of weather, is not at present well understood. That in many cases the appearance of the heavens is not the source from which their information proceeds, is satisfactorily proved by the signs of uneasiness frequently expressed by them, when as yet the most attentive observer can detect no signs of change, and even when they are placed in such circumstances as preclude the possibility of any instruction from this quarter. For instance, dogs closely confined in a room often become very drowsy and stupid before rain; and a leech confined in a glass of water, has been found, by its rapid motions or its quiescence, to indicate the approach of wet, or the return of fair weather. Probably the altered condition of the atmosphere with regard to its electricity, which generally accompanies change of weather, may so affect their constitution as to excite in them pleasurable or uneasy sensations to a much greater degree than we experience; though even man is not altogether insensible to atmospheric changes, as the feelings of utter listlessness which many experience before rain, and the aggravated severity of toothache, headache, and rheumatism, abundantly testify.

Rain may be expected when swallows fly low, and skim backwards and forwards over the surface of the earth and waters, frequently, indeed, dipping their wings into the latter. The reason is obvious; swallows prey upon flies and other winged insects, to whom the warmest strata of air afford the most congenial abode; and when such are nearest the earth, the cold and heavier stratum above may be expected sooner or later to descend, in its passage converting some of the superabundant moisture into rain.

At the approach of storms, sea-gulls flock to the shore, not, as some would have us suppose, to seek for shelter from the fury of the elements, but because the small fish upon which they prey during calm weather leave the surface when agitated by winds, and seek the deeper and more settled waters, while the earth-worms and larvae driven out of the ground by severe floods, afford them an abundant repast. The little petrel, on the contrary, exults in the heaviest gale, and loves to float upon the stormy ocean, because, living on the smaller sea insects, he is sure to find his food in the spray of the most threatening billow. Owls screeching at night are signals of bad weather, and upon this circumstance probably depends the evil name which this bird has received, since changes of weather are particularly dangerous to persons labouring under severe diseases. Indeed, among all birds of ill omen the owl stands foremost. Ancients and moderns have united to celebrate its fame as a harbinger of mischief and of death. Pliny denominates it a funeral bird, a monster of the night, the abomination of human kind. "The ill-faced owle, death's dreadful messenger," is spoken of by Spencer in his *Fairie Queene*, amidst a woeful catalogue of harmful fowls; and many a victim of superstition has quailed, when, in the dead silence of the night, this solemn boding sound has struck upon his ear.

The squalling of peacocks, the unusually loud chirping of sparrows, and the increased garrulity of crows, are likewise considered indications of rain; and the same may be expected when ducks, geese, and fowls, wash and dive in the water more than usual, when frogs croak loudly, when toads come from their holes in great numbers, and when moles are particularly active in throwing up the earth.

When bats remain a long time abroad, fine weather is prognosticated; but when they squeak much, or enter houses, rain will most generally ensue.

The loud and frequent howling of wolves is a very unfavourable omen, especially when at the same time they are more bold than usual, and approach nearer to human habitations.

At the approach of thunder, water-rats leave the water, and seals appear on shore when a storm is impending. Bees do not range abroad as usual, but keep in or near their hives when wet weather is about to commence; at the same time ants are particularly active in carrying about their eggs, spiders appear on the walls in great numbers, and worms are numerous upon the surface of the ground.

It is said to be a sign of rain when cocks crow at uncommon hours, and clap their wings frequently. Hares have often been observed to exhibit peculiar uneasiness before a thunder-storm; and mice, at the commencement of wet weather, are said to be very noisy, and to contend much together. When, after long-continued dry weather, the clouds are gathering, and rain approaching, we may frequently observe horses and oxen stretching out their necks, and snuffing in the air with distended nostrils; and often before storms, assembled in a corner of the field,

With rueful gaze
The cattle stand, and on the howling heavens
Cast a deploring eye;

at the same time turning their heads to leeward. Sheep and goats sometimes eat more greedily than natural before rain, and seem to quit their pastures with reluctance. At other times, their frequent gambols and uneasy startings betray their consciousness of the coming change.

Such, then, are the most important facts which we have been enabled to collect as indicating changes of the weather; their number might have been greatly increased, but this would have swelled our article to an inconvenient length. Many, perhaps, may smile at the importance which we have assigned to this subject. Let such deriders pause ere they condemn; let them consider that the accumulated experience of ages has confirmed the truth of these observations, and that even if the immediate cause be hidden from our eyes, such is not the case in this instance alone; in every department of nature we meet with facts that are at present inexplicable. In conclusion, we would fain hope that enough has been said to show the extent and interest of the subject, and to convince our readers that "coming events do cast their shadows before them."

THE HAYS OF LONCARTY,

A SCOTTISH TRADITIONAL STORY.*

It was in the course of those romantic days, in the tenth century, when deeds of violence prevailed, and some of our ancient families gained possession of title and fortune at the risk of life and limb, that the noble line of the Hays first began to have an historical origin in Scotland. Denmark, at the time we speak of, was a warlike kingdom, and for a considerable period carried on with less or more success a system of predatory invasion of the northern parts of Britain. One of the most alarming of these direful visitations of the seakings, as the Scandinavian or Danish chiefs were called, was that of Haco IV., in the time of Kenneth III. of Scotland.

When the intelligence of Haco's intended invasion reached the Scots, the consternation and anxiety were proportionate to the occasion. Learning the tidings, the Scottish monarch immediately dispatched messages to all his nobles and chiefs that could be reached, for them to come forth with their followers, and meet him near the east coast, to encounter the Danes, and vanquish them before they should take the kingdom.

Landing at the mouth of the Esk in Angus, the rapacious legions of Denmark soon overran the coast country. Robbery and rapine had its full sway for a time: the unresisting people fled before the invaders, who spread terror and desolation wherever they went, and harried and burnt all the towns and villages from Bervie in Forfar to the Firth of Tay. It was not until the invaders were within a few miles of Perth, which they had determined immediately to carry by storm, as well as to gut and pillage the old palace of Bertha, that the army, hastily collected by the Scottish king, were able to offer some check to their progress.

When the Scots came up, they found the Danes in a crowded encampment on the face of a hill, near a village by the Tay, in the parish of Redgorton, in Perthshire, and still—though known chiefly in the neighbourhood as an extensive bleaching-ground—well remembered in history by the name of Loncarty. When the Danes saw the Scottish army approach, and the latter descried the formidable legions of their invaders, pitched rank behind rank on the face of the height, a solemn pause took place between the armies, as if both felt that the fate of their existence or that of their country was almost too much to be put to the risk of a single engagement.

On the edge of a hollow, on a branch of the stream, near which the armies lay, there lived at this time an industrious "landwart man," who, notwithstanding the terrors of invasion, peacefully prosecuted the labours of the field. Athletic and powerful, though not very rich, this farmer had two sons as brave as

himself, yet by no means as peaceably inclined, or on an occasion like this so disposed to their labours, when war and ravage were almost at their door. When, therefore, the blast of war blew almost at their ears, and the cry of the coming foe began to be shouted along the valley of Glenshee, the hearts of the young men beat high at the sound; they looked on their father's ploughings with youthful contempt, and murmured and muttered, as young men will do, that no one would lead them to the forthcoming battle.

"Why should we labour here," they said, "on this cold sterile spot, while there are rich lands on the Tay from Errol to Kinnoul, which the king has to give to his brave defenders? The Danes are come to the very hill of Loncarty, while we roost here over our plough, like base louts of the field. Will no one give us a sword or hauberk, that we may strike a stroke for Scotland and the king?"

"Hooley, boys, hooley," said the cool landwart man, "the maiden does not dance till she's bid to the floor, and the piper does not pipe till he knows who hires him. The lands, to be sure, are broad in Strathgry, and rich in Gowrie, but every cheese must keep to its own chisnet, and every man to his own trade, till fortune comes to buy him lands that his father never paid for. So keep your valour till you get the word, and hold your plough irons to defend your own heads. Up! the sun is high, let us go to the ploughing."

With reluctant steps the youths followed to their labours, but the sough of war rose up through the glen; the boom and buzz of distant squadrons disturbed their industry and swerved their attention, the shrill note of the pibroch came fitfully on the blast to make their hearts bound with stirring thoughts, and crowds of stragglers hurrying down the valley unsettled their minds to their lowly toil. But we must now return to the king's camp in the neighbourhood, and speak of the great things that were doing in the war.

The armies were now ready for the onset, the Danes descending to the foot of the hill, and the Scots in lines on the little field below. Malcolm Duff, "Prince of Scotland and Lord of Cumber," led the right wing; Duncan, thane of Athol, the left; while the king himself, with his principal nobles and best men, took charge of the centre. The anxiety of the Scots monarch for his kingdom and his existence was shown by the pains he took to animate his army. "To move his nobles with courage and spirit," says the old chronicler Boethius, whose graphic account of this engagement we cannot hope to equal, "King Kenneth discharged them of all malice and duties to him for five years to come, then promised, by open proclamation, to give ilk man that brought him the head of ane Dane ten pund, or else land perpetually." When this was done, the worthy king "made orison to God to send his cause gude fortune."

"The armies stood long arrayed," continues the able chronicler, "while at last the Scots, too fierce and desirous of battle, came with incredible shower of darts, arrows, and ganyes on the Danes, who, impatient to sustain the invasion of Scotland, came forward with great noise." No corresponding shout, however, was set up by Kenneth's army, who joined in battle without even a sound of trumpet, and both "fought so fiercely that none of them might sustain the press of the other."

Whatever was the patriotic ardour of the Scots on the present emergency, they do not appear to have forgotten their individual interests; so the ten pounds or pund that the king had promised so ran in each man's mind while he fought, that the heads of Danes, with a view to their value, were the chief thing that all aimed at, to the great detriment of the general battle. Thus, whenever a Scotsman killed a Dane, his great care was to cut off the man's head, and carry it, for safety, dangling in his hand, or else to run with it to the rear to secure his reward, and leave the victory to take care of itself. The consequences of this preponderance of individual interests were soon manifest; and when the Danes observed it, says Boethius, picturesquely, "they cryet out with a schill voice, either to have victory" over such a head-cutting people, "or all at once to die. So, incontinent, they rushed with such propellant forward, that both the wings of Scots were put to flight."

"Nochtless," however, continues our quaint historian, "the mid battle resisted valiantly the hail press of enemies. Now stood our army in great danger, for many of the Scots fled" (head in hand), "and were cruelly slane by the Danes."

The douce old farmer and his sons, meantime, kept coolly labouring at their plough at the head of their native glen, although the noise and havoc of the distant battle sorely tried the self-denial of the young men. When the bruit arose, however, that their countrymen were beginning to flee, they could stand it no longer, and taking the ploughing yokes of their oxen in their hands, for want of better weapons, away they set, at least, to have a stroke at the dastards of their own people, who now began to run across the fields near them. Proceeding onwards towards the army, they came to a narrow pass in the rear, through which the retreating Scots were rushing to get out of the danger.

Fired with indignation at this increasing cowardice, while they saw their country now at the mercy of the invaders, although the king still fought with the centre division of his men, naked of both the wings, the gallant countryman and his two sons, thinking nought

so honourable as to fight valiantly among so many noblemen, placed themselves in the gorge of the passage, and slew both Danes who pursued and Scots who fled; saying that all men deserved to die who turned their backs upon any enemy.

This noble conduct had an instantaneous effect to stay the panic. What by exhortations and what by heavy blows with the yokes of their ploughs, the gallant farmer, assisted by his family, constrained the Scots which were fleeing, to return with him to battle against their enemies. They did so, and the Danes, astonished by their returning, and trusting that this was "some new army coming on their backs, left the chase of Scots, and returned to their folk. Then the Scots (which were vanquished afore) were raised with new spirit and courage, rushed fiercely on their enemies, and put them to flight." Great slaughter was made in the battle, but more in the chase. "So the Scots," continues the chronicler, "got this day ane glorious victory," particularly creditable to the perseverance of the mid wing of the army; "yet maist honourable to the farmer and his valiant sons."

So unexpected was the advantage, after so disastrous a morning, and so complete and final was the discomfiture of the invaders, that the joy of the victors was almost as boundless as the king's gratitude to the patriotic individuals who had been the means of achieving so glorious an adventure. The night after the battle was passed in the Scots camp with singing and dancing, and incredible blitheness, and the succeeding day was looked forward to with pleasure, that the nobles and men who thus rejoiced might witness the honours given to the worthy agriculturist and his brave sons.

But the spoil was so considerable that had been taken from the invaders—their ravages through this part of the country having been very productive while they lasted—and the occasion so important of awarding its distribution, that the king, returning to his castle of Perth, there commanded the valiant farmer, who had been the means of his glorious achievement, to be arrayed in cloth in splendid apparel, and forthwith brought before him.

The good man, however, nothing desiring the offered splendour, and considering that he had done nought but his duty to his country, "came with his sons in their auld and rusty habit, still sprinkled with the dust and sweat of battle," and modestly waited the king's pleasure. It was a brave sight to see his majesty in the midst of his nobles, awarding to each leader his portion of the spoil, while crowds of people rent the air with acclamation. "What wilt thou have, brave man," said the king, "and how shall I content thee for what thou hast done for thy country and for me?"

"I have done but my duty, honourable liege," said the farmer, "and it is not for myself that I would ask a reward; but my sons have maidens that they long to wed, and there are riggs of land from Errol to Kinnoul that bear a crop of richer promise than the watery pastures in the Spital of Glenshee." "Thou hast said right and modestly withal," answered the king; "and thy gallant sons shall have such riggs as a willing maiden may not refuse. To-morrow, make proclamation in our good city of Perth," he added, turning round to his attendants, "that we meet with our court, and as far as the hawk shall fly, from our own hand, and until the spot where he alights again, if that shall extend over a shire of our kingdom, these lands shall the farmer and his sons have in full perpetuity, for the service they have rendered us on the field of Loncarty."

Accordingly, after a day of acclamation and joy, in which Kenneth and his army went in procession through his good city of Perth, the admiration of the people being more given to the gallant farmer and his brave sons than to all the nobles then in the monarch's train, the whole assembled at the appointed place in the Carse of Gowrie, amidst a gay crowd of lords and ladies, that the king's award might be honourably given. The gay company was that morning set like hunters in the greenwood. The falconer was ready, and handed his best bird to the king, while all the nobles stood round in courtly attendance. The hood was taken off the impatient bird; it rose like an arrow off the king's finger; and while it mounted high in air, the people gave a shout that made the welkin ring, and could almost be heard at the hill of Kilsindie. Away galloped the horsemen forth into the plain, that they might see and give witness where the falcon should fly.

Away went the bird out of all men's sight, and it flew and flew and never stopped, until it began to draw near to the town of "bonnie Dundee." Then it poised itself, and began to descend, until it lighted down on "ane stane," which is still pointed out to the traveller in these parts, and called the Falcon Stane until this day; and so when the messengers returned, the king gave to the farmer all the lands over which the falcon flew between Tay and Errol, which lands, according to the chronicler, are yet inhabited by his posterity. In order also that none of his valiant deeds should perish, but remain in perpetual remembrance, the king bestowed on him the right to bear a coat of arms—three red shields in a field of silver, with supporters—two husbandmen carrying over their shoulders an "owsen yoke," the crest being a hawk volant or flying, all which honours continue to remain with their numerous descendants.

What was the name of the valiant farmer who thus

* This story, a mixture of history and popular tradition, is extracted, with some alterations and additions, from a work entitled "Traditional Stories," by Andrew Picken. 2 vols. Longman and Company, London, 1855.

saved Scotland in its day of need, is now unknown, being lost amidst the obscure traditions of the country. It is, however, well ascertained that the original appellation was dismissed, and that of Garadh given in its stead, in allusion to the celebrated action we have narrated, and signifies a dike or barrier. The first of the Garadhs was hence the originator of a clan—the Clan na Garadh, afterwards dreaded for its potency, and having a slogan song, commencing with the following stirring words, adapted to the wild music of the bagpipe:—

“Mac Garadh! Mac Garadh! red race of the Tay,
Ho! gather, ho! gather like hawks to the prey:
Mac Garadh, Mac Garadh, Mac Garadh, come fast,
The flame’s on the beacon, the horn’s on the blast.
The standard of Errol unfolds its white breast,
And the falcon of Lonscarty stirs in her nest:
Come away—come away—come to the tryste—
Come in, Mac Garadh, from east and from west.”

The Clan na Garadh, as surnames came into use, adopted the Norman appellation of Hay, which bears a meaning resembling that which was given up. The chief family of the Hays figured in many of the historical transactions of an after period. Not to dwell on these stirring and distracted times, it was for his services during Bruce’s struggle for independence that the grateful monarch raised Gilbert de la Hay to the dignity of hereditary high constable of Scotland, which is held by the Earls of Errol—the descendants of the hero of Lonscarty—until the present day.

BIOGRAPHIC SKETCHES.

ARCHIMEDES.

THIS celebrated philosopher of antiquity was a native of Syracuse in Sicily, and is supposed to have been born about two hundred and eighty years before the commencement of the Christian era. The countries within and around the Mediterranean, of which Sicily was one, then contained the only existing nations which knew any thing beyond what the barbarian can observe; yet the advances made in science were so very small, and confined so entirely to a few scattered minds, chiefly in the more enlightened countries of the eastern parts of the Mediterranean, that considerable difficulty has been experienced in conjecturing in what manner, and to what amount, Archimedes obtained instruction from his predecessors and contemporaries. Euclid lived fifty years before him; but it is questionable if Archimedes derived any advantage from the studies of the Alexandrian sage. It has been supposed that he derived much of his knowledge from Egypt; while some are of opinion that he must have communicated to that country as much as he received, since it is mentioned by his own countryman Diodorus, that Archimedes imparted to the Egyptians the invention of the cochleon or screw-pump for drawing off water. This illustrious philosopher unquestionably owed the high distinction which he obtained among his contemporaries, and the immortal name which he has transmitted to posterity, chiefly to his own vigorous and inventive intellect. Diodorus celebrates Archimedes as the author of many inventions, much greater than that of the cochleon, which had rendered him famous through the world. Livy speaks of him as a singularly excellent observer of the heavenly bodies, and as possessing a still more wonderful power of inventing and constructing warlike machines. His ingenuity in solving problems was, in Cicero’s time, become proverbial. In a letter to Atticus, he informs him that he is now freed from a difficulty which, strongly to express its magnitude, he calls *problema Archimedion*, an Archimedean problem. Though it may not be easy, from the accounts which remain of the inventions of Archimedes, exactly to learn their nature and use, enough is known to justify the high encomiums bestowed upon him. If it be difficult to conceive that he made a glass sphere which represented the motions of the heavenly bodies, it may be believed that he constructed, from other materials, some kind of planetarium, which represented the celestial phenomena with sufficient accuracy to afford some foundation for the verses of Claudian, thus translated:—

When in a glass’s narrow sphere confined,
Jove saw the fabric of th’ almighty mind,
He smil’d and said, “Can mortal’s art alone
Our heavenly labours mimic with their own?
The Syracusan’s brittle work contains
Th’ eternal law, that through all nature reigns.
Fram’d by his art, see stars unnumber’d burn,
And in their courses rolling orbs return;
His sun through various signs describe the year,
And e’ery month his mimic moons appear.
Our rival’s laws his little planets bind,
And rule their motions by a human mind.
Salmones could our thunder imitate;
But Archimedes can a world create.”

In proof of Archimedes’s knowledge of the doctrine of specific gravities, a singular fact is related in Vitruvius. Hiero, king of Syracuse, suspecting that in making a golden crown which he had ordered, the workmen had stolen part of the gold, and substituted in its stead an equal weight of silver, he applied to Archimedes, entreating him to exercise his ingenuity in detecting the fraud. Contemplating the subject one day as he was in the bath, it occurred to him that he displaced a quantity of water equal to the bulk of his own body. Quitting the bath with that eager and impetuous delight which a new discovery naturally excites in an inquisitive mind, he ran naked into the street, crying, *Eureka! Eureka!* [I have found it out! I have found it out!] Procuring a mass of gold, and another of silver, each of equal weight with the crown, he ob-

served the quantity of fluid which each displaced, successively, upon being inserted in the same vessel full of water; he then observed how much water was displaced by the crown; and, upon comparing this quantity with each of the former, soon learned the proportions of silver and gold in the crown.

In mechanics and optics the inventive powers of Archimedes were astonishing. He said, with apparent, but only apparent, extravagance, “Give me a place to stand upon, and I will move the earth;” for he perfectly understood the doctrine of the lever, and well knew, that, theoretically, the greatest weight may be moved by the smallest power. To show Hiero the wonderful effect of mechanic powers, he is said, by the help of ropes and pulleys, to have drawn towards him with perfect ease a galley which lay on shore, manned and loaded. But the grand proofs of his skill were given during the siege of Syracuse by Marcellus. Whether the vessels of the besiegers approached near the walls of the city, or kept at a considerable distance, Archimedes found means to annoy them. When they ventured closely under the rampart raised on the side towards the sea, he, by means of long and vast beams, probably hung in the form of a lever, struck with prodigious force upon the galleys, and sunk them: or by means of grappling hooks at the remote extremity of other levers, he caught up the vessels into the air, and dashed them to pieces against the walls or the projecting rocks. When the enemy kept at a greater distance, Archimedes made use of machines, by which he threw from behind the walls stones in vast masses, or great numbers, which shattered and demolished the ships or the machines employed in the siege. This mathematical Briareus, as Marcellus jestingly called him, employed his hundred arms with astonishing effect. His mechanical genius was the informing soul of the besieged city; and his powerful weapons struck the astonished Romans with terror. One, in particular, consisting of a mirror, by which he concentrated the rays of the sun upon the besieging vessels and set them on fire, must have produced an extraordinary impression upon those who suffered from it, seeing that it was of so wonderful a character as to be thought a fiction by subsequent ages, until its reality was proved by the repetition of the experiment. Buffon contrived and made a burning-glass, composed of about four hundred glass planes, each six inches square, so placed as to form a concave mirror, capable of melting silver at the distance of fifty feet, and lead and tin at the distance of one hundred and twenty feet, and of setting fire to wood at the distance of two hundred feet; and the story of Archimedes’s instrument for burning ships at a great distance was no longer ridiculed.

Eminent as Archimedes was for his skill and invention in mechanics, his chief excellence, perhaps, lay in the rare talent which he possessed of investigating abstract truths, and in inventing conclusive demonstrations in the higher branches of pure geometry. If we are to credit the representation of Plutarch, he looked upon mechanic inventions as far inferior in value to those intellectual speculations which terminate in simple truth, and carry with them irresistible conviction. Of his success in these lucubrations, the world is still in possession of admirable proofs in the geometrical treatises which he left behind him. Of the unremitting ardour with which he devoted himself to mathematical studies, and the deep attention with which he pursued them, his memoirs afford striking and interesting examples. It is related of him, that he was often so totally absorbed in mathematical speculations, as to neglect his meals and the care of his person. At the bath he would frequently draw geometrical figures in the ashes, or, when according to the custom he was anointed, upon his own body. He was so much delighted with the discovery of the ratio between the sphere and the containing cylinder, that, passing over all his mechanic inventions, as a memorial of this discovery he requested his friends to place upon his tomb a cylinder, containing a sphere, with an inscription expressing the proportion which the containing solid bears to the contained.

No sincere admirer of scientific merit will read without painful regret, that when Syracuse, after all the defence which philosophy had afforded it, was taken by storm, and given up to the sword, notwithstanding the liberal exception which Marcellus had made in favour of Archimedes, by giving orders that his house and his person should be held sacred, at a moment when this great man was so intent upon some mathematical speculation as not to perceive that the city was taken, and even when, according to Cicero, he was actually drawing a geometrical figure upon the sand, an ignorant barbarian, in the person of a Roman soldier, without allowing him the satisfaction of completing the solution of his problem, ran him through the body. This event, so disgraceful to the Roman character and to human nature, happened 212 years before Christ. It was a poor compensation for the insult offered by this action to science in the person of one of her most favoured sons, that Marcellus, in the midst of his triumphal laurels, lamented the fate of Archimedes, and, taking upon himself the charge of his funeral, protected and honoured his relations. The disgrace was in some measure cancelled, when Cicero, a hundred and forty years afterwards, paid homage to his forgotten tomb. “During my questorship,” says this illustrious Roman, “I diligently sought to discover the sepulchre of Archimedes, which the Syracusans had totally neglected, and suf-

fered to be grown over with thorns and briars. Recollecting some verses, said to be inscribed on the tomb, which mentioned that on the top was placed a sphere with a cylinder, I looked round me upon every object at the Agragentine Gate, the common receptacle of the dead. At last I observed a little column which just rose above the thorns, upon which was placed the figure of a sphere and cylinder. This, said I to the Syracusan nobles who were with me, this must, I think, be what I am seeking. Several persons were immediately employed to clear away the weeds and lay open the spot. As soon as a passage was opened, we drew near, and found on the opposite base the inscription, with nearly half the latter part of the verses worn away. Thus would this most famous, and formerly most learned city of Greece, have remained a stranger to the tomb of one of its most ingenious citizens, had it not been discovered by a man of Arpinum.”

Several invaluable remains of this celebrated mathematician are preserved, and have been frequently published. Besides those in pure geometry, there was a treatise entitled *Arenarius*, in which is demonstrated, that not only the sands of the earth, but a greater quantity of particles than could be contained in the immense sphere of the fixed stars, might be expressed in numbers, by a method in which the author makes use of a property similar to that of logarithms.*

DIAMONDS AND DIAMOND MINES.

[From the Dumfriess Courier.]

THE diamond is admitted to be the king of gems, and seems to have been in high repute among the most savage as well as civilised nations, almost, it may be said, since the creation of the world. The Garden of Eden, as we read in Genesis ii. and 12, was watered by a river which had four branches, the first of which, Peton, contained “good gold, and the onyx stone.” The ambassador sent by Abraham to Bethuel, to ask his daughter in marriage for his son Isaac, presented “jewels of gold and silver, and precious things;” and in Exodus the diamond is still more plainly mentioned as the distinguishing badge of the tribe of Isaac, in the sacerdotal robes of Aaron, the high priest. In fact, from the earliest periods of which any written records exist, diamonds have been collected to adorn the sceptres of emperors, kings, and chiefs. The Greek and Roman potentates, as well as the subsequent monarchs of Europe, possessed many rare and valuable stones of the class named, not a trace of which remains at the present day. From this circumstance, it may be inferred that they were lost during times of pestilence, or those equally dire convulsions when the sword is the great slayer, and produces effects still more disastrous than the entombment of Pompeii and Herculaneum. Coins of all sorts, and of every date, are frequently found buried in the earth; and as we never hear of diamonds being recovered in the same accidental manner, they perhaps decompose after a certain time, from causes we can only guess at, in the absence of every thing like certain information.

The largest known diamond, which is called the Brazilian, weighs 1680 carats, and is valued at twenty-two millions of money! It was found by an ignorant native of Brazil, who cleft it with a hammer to test its hardness, an experiment from which it suffered great deterioration. It is shaped like a turkey’s egg, and is rose-cut all over. At one time it belonged to the house of Braganza, but was pledged to his Celestial Majesty at the time the Portuguese formed the settlement of Macao. The Russian ranks next to the Brazilian diamond in weight and value, the former being 779 carats, and the latter L.4,854,280. It is of the shape of an eye, and “cut brilliant.” It was stolen from a Malabian idol by a French grenadier, who, when in India, became a Mahomedan, was promoted to the priesthood, and then fled to Europe, carrying a treasure along with him which he afterwards sold for a few dollars. After this it passed through many hands, and was at last bought by Prince Orloff at Amsterdam, in 1766, for Catherine of Russia; price, L.135,417. It is now in the sceptre of the autocrat of all the Russias. The diamond named the Great Mogul weighs 276 carats, and is valued at L.380,000. It is rose-cut, and exhibits a flaw, which, however minute, detracts greatly from its value. It is in the possession of the rajah of Malaam. All the world have heard of the Pitt diamond; weight, 136½ carats; value, L.208,353. The price paid for it, however, by the Duke of Orleans, then regent of France, was only L.125,000. The history of this brilliant is curious. Mr Pitt, ancestor of the great statesman, when governor of Fort George in India, bought it from a native prince for L.5000. The chips, when it was cut at an expense of L.7000, realised still more money; and after paying L.5000 as the expenses of negotiating a sale, the governor named above cleared L.116,000 by his bargain. Charles X. at the time of the revolution in 1830, attempted to march off with this the greatest gem in his coronet, but was glad to restore it to the commissioners who formed part of his escort, and ensured him a safe passage through his late kingdom. Next in the list we find the Swabian diamond; weight, 139½ carats; value, L.119,520. The colour is a deep yellow, and the stone altogether bears a strong resemblance to an Oriental topaz. As gems of this hue are extremely rare, great importance is

* Abridged from an article by Dr Enfield in Alkin’s General Biography.

attached to the one in question, which adorns the imperial crown of Austria. George IV. or the Blue diamond, is of a deep indigo colour, and was purchased by his late majesty in 1823, from Mr Elisson, for £30,000. This gentleman, who was an eminent diamond merchant in London, received his majesty's commands to visit the palace as often as he had any rare gem to dispose of. The Pigot diamond, weighing 55 carats, and valued at the price mentioned above, was disposed of, by lottery, by the East India Company, in shares of £25 each. The members of that body subscribed liberally, and on the drawing day it fell to the lot of one of their number. The above list comprises the principal diamonds in the world; and it will be seen that their aggregate estimated value amounts to the prodigious sum of very nearly thirty millions sterling. But there are hundreds, or rather thousands, of smaller ones in private collections, and scattered over a still wider surface.

Such diamond mines as are known to exist, are confined to two quarters of the globe—Asia and America. The principal Indian mines are Raoleda, Gani or Coulour, Soumelpour, and Saccadan, in the kingdoms of Golconda, Visapour, Bengal, and Borneo. Stratifications of the first, rocky; second, terraqueous; third and fourth, sandy river mines. In the rocks containing diamonds are found several little veins of from one half to an inch in thickness: into these the miners insert a hooked iron, drawing together the earth where the diamonds lodge, and breaking the rocks where the veins terminate, that the track may be found again. When the earth is removed, they wash it to separate the stones. At Gani, when the miners find a place where they intend to dig, they level a similar quantity of ground somewhat near it, which they further inclose with a wall two feet high, leaving apertures from space to space for the egress of the water. After a few ceremonies, and a feast given by the master to encourage the men, the miners fall to work cheerfully, digging twelve or fourteen feet until they come upon promising materials, which the women and children carry off, and after washing them more than once, employ a sieve as Europeans do in winnowing corn, while searching with all the anxiety imaginable in the hope of finding a valuable diamond. With the exception of the overseers, the persons engaged in this craft are all slaves, and must doff every garment while on the working grounds, with the exception of a piece of cloth bound round their loins. Yet in spite of every precaution, gems are secreted—in some instances by swallowing them, and in others by hiding them in sores of the body. As a bounty upon diligence, every slave who finds a diamond of a certain weight is declared free, and may thenceforth follow any occupation which fancy or self-interest may chance to dictate.

Soumelpour is on the river Gout. The town is large, and built of earth, covered with branches of the cocoa-nut tree. The natives look for diamonds after the rainy season, in the month of December. They wade through the river as high as they possibly can, damming up the water at the sides, and sieving the sand. From fifty to sixty thousand souls are employed at each of the mines. The Brazilian diamond districts are in the hands of the government, and are worked in precisely the same manner.

The diamond is the hardest of all stones yet discovered, and when brought to Europe in its rough state, is either in the form of a pebble, with a shining surface, or of an octoedral crystal. Though this gem is commonly clear and pellucid, yet some are met with decidedly red, pink, green, yellow, blue, black, brown, and some with black specks, and others of dusky blue. The finest diamonds are those tintured with the above colours in a high degree; but if only slightly, their value is greatly diminished. They derive their colours from the action of the soil; and it has been remarked, that in the rough state they generally weigh heavier than the pure of the same size. There are two classes, Oriental and Occidental; the first the finest and hardest, from the Eastern—the latter inferior and softer, from the Western World. Many experiments have been made in dissolving both, and it has been substantially proved that a powerful burning lens, from solar heat, has accomplished it sooner than the heat of a furnace. A diamond, weighing thirty grains, exposed thirty seconds, lost its lustre, colour, and transparency, and became opaque white in five minutes; bubbles appeared on its surface: soon afterwards, it burst into pieces, which were dissipated, and the fragments remaining were crushed into fine powder by the pressure of the blade of a knife. The action of fire on diamonds is great; if placed in a crucible, covered with a perforated lid, and exposed to the long heat of a porcelain furnace, they will dissolve into charcoal, and ultimately evaporate. Diamonds belong to the exclusives, for they can only be cut by their own class; and to bring them to perfection many are rubbed together, the dust of which is the powder used to cut and polish all precious stones, which is done by a mill that turns a wheel of soft iron, sprinkled over with what the diamond lapidaries call "bort," made with oil of olives. The same machine and liquid mixture is used to cut coats of arms, crests, &c., on stone seals. This powder, with vinegar, is used to saw the diamond, and all other stones, which is performed by a brass or iron wire, as fine as a hair. Diamonds are classed first, second, and third water; to apply any other epithet of their inferiority, than "flaw," to the king of gems, would be derogatory to its dignity. The eminent jeweller to the Prince Regent, Mr Jeffries, constructed

tables of the value of diamonds, from 1 to 100 carats; but since that time the excellent imitations so very generally in fashion amongst the higher classes, have greatly tended to lessen the demand, and along with that their value; still his is the best calculator extant. He rates a carat at £2 in the rough at a medium. To find the value, multiply the square of their weight by two; the product is the required value. Example—to find the value of 2 carats: 2 mul. by 2=4 square of the weight, which multiplied by 2 gives £8. In finding the value of cut diamonds, after allowing for the heavy loss in manufacture: multiply the square of double the weight by 2. Example—a wrought diamond of 2 carats, 4 mul. by 4=16; then 16 mul. by 2=£32; and so on.

The distinguishable quality and different classes of the cut diamonds are as follow:—

The Brilliant is the most valuable and thickest; it is cut in facets, top and bottom, and the table or principal facet at the top is flat. The parts of the small work which complete the brilliant, or the star and skill facets, are of a lozenge figure, while the bottom is cut into a point, by ribs similarly cut on all sides. Great caution and judgment are required to fashion them; for, if ill proportioned, by being too heavy for the size, their value is greatly diminished. Dealers and connoisseurs generally judge their weight by the eye, for every carat stone has its peculiar size; thus, if too thick, it is called "an over-weighter;" if the thickness is less than the proportion, it is styled a "well-spread brilliant;" and, if of proper dimensions, a "full substance."

The Rose is cut into many little triangular facets, brought up into a point on the top, and the bottom quite flat.

The Table is quite flat on both sides, and very thinly sliced, with a little facet work on its edges, and sometimes plain. They are of the lowest class, and principally used to jewel watches; but rubies are more esteemed for their hardness.

The Sparks are those small finely pointed diamonds which are set in their natural state in jewels.

All diamonds and precious stones are sold by weight. A carat consists of four grains, and is subdivided into parts of $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{16}$ th, $\frac{1}{32}$ d, and $\frac{1}{64}$ th of a carat.

PAINTING AND PAINTERS.

THE early history of painting contains little that is useful to the art; it, however, tends to prove how gradually the knowledge of painting has been acquired, perhaps cycles of ages having passed ere the simplest idea of delineation entered the mind of man. The early attempts of the Chinese and the Egyptians appear to have been confined to coarse outlines, occasionally filled up with crude colours; and Plato states, that although the art had been practised in Egypt for thousands of years, it had advanced no farther in his time, which was about 400 years before the Christian era. The Persians prove that their knowledge of the arts must have been very limited, by the high admiration in which they held these rude productions of the Egyptian pencil. The Arabians appear to have exercised their talents in Mosaic works—that is, pieces in which the various colours are produced by a combination of inlaid parts; but drawing must have been little known where straight lines could draw forth applause. The artists of Etruria, the modern Tuscany, appear the first of whom we have any knowledge, who connected the arts with the study of nature; but even these, and the productions of the artists of Greece, are involved in great obscurity until the time of Pliny, who states that the first painter lived in the 90th Olympiad, about 420 years before the Christian era. Polygnot, of Thasos, was the first who clothed his figures in different colours; Aristotle says that he also excelled in expression; but such judgment must have been founded on comparison with previous efforts of art.

Dionysius Halicarnassus states, that the paintings of the ancients were simple, correct in drawing, and remarkable for elegance—qualities that placed them in the higher ranks of the art. He also states, that the painters who succeeded were less correct in drawing, that they used a greater variety of colours, and were more elaborate in their finishing. The Greek and Roman early works of art which have been preserved, such as are displayed on Etruscan vases, or in fresco, that is, painted in water colours, on walls, do not prove that they had any knowledge of the use of oil in the application of their pigments, although it appears they used a species of varnish on the surface of their works.

It was not until the fourteenth century that the art of painting revived from the profound ignorance of the period denominated the dark ages. Italy was the first to recognise the value of the art, and by the great encouragement extended to painters by successive pontiffs and other wealthy ecclesiastics, extraordinary

talents were elicited in the decoration of numerous places of worship with subjects from sacred history. Thus painters gradually improved in the truth of representation, foreshortening, perspective, and effect.

Rome, once the mistress of the world, had handed down in its ruins the remains of her greatness; and it was from the study of these relics of art that the painters improved in knowledge of design, greatness in style, beauty of form, and justness of expression. The works of Michael Angelo, Leonardo da Vinci, Giorgione, Titian, and Raphael, produced, in the fifteenth and sixteenth centuries, all that is valuable in the highest departments of the art, and Rome is therefore the point to which the painters that Europe has produced have chiefly turned their attention.

The different styles, or, as they have been called, schools of painting, which have been established, are, according to precedence, the Florentine, the Roman, the Venetian, the Lombardian, being the Italian schools; then the French, the German, the Flemish, the Dutch, and the English.

Michael Angelo Buonarroti, a native of Tuscany (born 1474, died 1564), of the Florentine school, delighted in representations of the grand and the terrible; he is remarkable for vigorous outline, and an excessive display of anatomical drawing, sometimes at the expense of character and truth. His great works are painted on walls in fresco, and his reputation stood so high in Rome, that he was employed by Pope Sixtus to paint his chapel; and by the command of Pope Paul III. executed his most celebrated piece, "The Last Judgment," still to be seen in the Sistine chapel at Rome, which obtained for him the character of being the greatest designer that ever lived. Michael Angelo was also a sculptor. Having produced a Cupid, in exquisite taste, he broke off one of its arms, and buried the figure where he knew it would soon be discovered; accordingly, it was dug up, universally extolled as an antique of superior workmanship, was purchased by Cardinal St Gregory, and highly esteemed, when, to the astonishment and confusion of the learned in antiquities, the arm was presented! It has been remarked that the manufacturers of antiques are not usually so ingenious. This highly endowed artist died immensely rich, at Rome, in the 90th year of his age. Buonarroti's style is dark, severe, and gigantic, giving to it the characteristics of sublimity; but in subjects which represent the writhings of agony, with great flexibility of joint and muscle, it is difficult to avoid touching on the absurd, by distortion of limb, or caricature in expression.

Of the Roman school, Raphael, who was a native of Urbino (1483—1520), may be considered the head. The great characteristics of this school are representations in the truth of nature, with such additions as the study of the antique may judiciously infuse—the great and the beautiful, with regularity of proportions—the just expression of the passions which animate the persons, or which may indicate the intention whence action originates—a chaste nobleness of design, correctness of drawing, a grace and a purity of taste. It is in the Vatican at Rome that Raphael appears to the greatest advantage; but the famed cartoons of this master are highly extolled for the above qualities. They are paintings in water colours on stout paper, and intended as originals whence tapestry was to be copied to adorn the pontifical apartments. They were purchased by Rubens for Charles I., and now grace the state rooms in the palace of Hampton Court. Raphael was distinguished among painters by the appellation of "the Divine;" he was also an architect, of such talent as to have been employed by Leo X. in the building of St Peter's at Rome. He was one of the finest proportioned men of his time, and many eminent masters were ambitious to work under him. He lived in great splendour, and died at Rome on his birthday, in the 37th year of his age, just as he had finished his celebrated "Transfiguration," which is considered the masterpiece of all painting. So highly was his genius esteemed, that his body was laid out in state in his painting room, with this picture placed near him, while, with pompous pageantry, the solemn ceremonies of the church were paid to the remains of this most incomparable painter.

After having contemplated the vast range which these two great masters embraced, namely, the vigorous composition of Michael Angelo, and the graceful simplicity of Raphael, the other schools of Italy appear very subordinate, although each had its admirers.

The Venetian school had for its great characteristics a harmony of colours, and a powerful contrast of light and shade, such as appeared by vigour of effect to command attention. Titian, a native of the Venetian state (1477—1576), ranks highest among its painters; his close imitation of the delicate tints of nature, and his happy disposition of colours, both proper and local, carried this part of the art to its highest point of perfection. In his paintings may be discovered that beautiful variety and just adaptation of half tints, which is so conducive to harmony. His management of transparency, opacity, roughness, and polish, are most admirable; and it was in these diversities, united to purity of colour, that he surpassed all other painters. He was an elegant and an accomplished man; many particulars are recorded of the friendship that existed between him and Charles V. A pencil slipped from Titian's hand while he was painting the portrait of that monarch, who immediately took it up, presented it, and, in reply to a respectful compliment,

said, "Titian merited to be served by Cæsar." To his jealous courtiers Charles said, "That he should never want a throng of courtiers, but he could not always have a Titian." This highly esteemed painter died in Venice, at the advanced age of ninety-nine years. Corregio (1494—1534) improved this school in elegance of design, the management of reflected lights, and transparency of shade. Tintoret (1512—1594) also considerably advanced the reputation of this school; yet the painters were less careful in selecting the most approved forms, than in arraying such as were inferior, in that variety of colours which appeared to them a beauty of greater attraction. Thus colouring became the characteristic of the school of Lombardy, or the Venetian.

The second Lombard school, or the school of Bologna, although graced by the works of the Carracci, Louis (1558—1619), Augustine (1557—1602), and Annibal (1600—1609), all of them men of extraordinary talents, contributed little to the advancement of the art, since neither varying the breadths of light or shade, nor higher finish, are to be considered improvements; and however meritorious as works of art, they were but repetitions or combinations of the excellencies of their predecessors in the highest department of the art. These justly celebrated painters were employed by Cardinal Farnese to paint the gallery of his palace. The most splendid of their productions is the Communion of St Jerome, in Bologna, by Annibal.

The painters of the various schools were principally engaged on altar-pieces, or subjects connected with scriptural history—the circumstances and sufferings of the Saviour, or the martyrs to Christianity—for which the greatest encouragement was given. Artists visited Rome, as a mine whence all that was valuable could be derived; and that city ever held out inducements to painters of superior talents, by which their reputations and their fortunes were increased. Hence the vast number of pictures that issued from Italy to find places in the collections that were forming all over the civilised world. Each of these painters had his rise, his meridian, and his decline; the earlier and the later of their productions are in no way to be compared with those painted about the period at which their masterpieces were finished, and this is worthy of notice when inspecting the pictures of masters whose names stand high in general estimation.

The French school was founded by Simon Vouet (1582—1641) and Charles Le Brun (1619—1690), notwithstanding Nicholas Poussin (1594—1665) had previously displayed extraordinary talents. Poussin had no scholars, yet cheerfully communicated his taste and judgment to the imaginative young Le Brun, who drew correctly, and who had adopted the better principles of the Italian schools. He composed with facility, and delighted in expansive subjects, such as his battle scenes. Nicholas Poussin, who is the brightest ornament of the French school, while in Rome was necessitated to sell his pictures for little more than the cost of the materials; yet he persevered; he was a great admirer of Raphael, whose thoughts he endeavoured to obtain by the closest attention; but he never copied any picture of the masters whose works he was desirous to emulate. He visited his native country with an improved talent, but finding himself ill-treated, he returned to Rome, after which his pictures were purchased by his countrymen and others as fast as he could finish them. He was remarkable for his fine figure and countenance, and nothing could equal the delicacy and simplicity of his manners. Le Brun, who was of Scottish extraction, was sent by Chancellor Seguin from France to Rome, where he copied Raphael and Michael Angelo to advantage. The series of pictures which he painted relating to the history of Alexander the Great, and finished at Fontainebleau under the patronage of Louis XIV., are justly esteemed. Le Brun was befriended by Cardinal Mazarin and M. Colbert, who obtained for him the direction of all the king's works, particularly the royal manufactory of tapestry at the Gobelins. A party of courtiers, in the presence of the king, remarked on the beauties of Le Brun's pictures, and concluded by observing that they would be more valuable after his death. "What!" exclaimed the king, addressing himself to the painter; "don't be in a hurry to die, for I esteem you as much as posterity can." Le Brun died highly respected, at an advanced age.

Eustach le Sueur (1617—1655), who was contemporary with Le Brun, materially assisted in giving consequence to the French school, by his approach to Raphael in the propriety of expression and attitude, the disposition of drapery, and harmony of colours; but unfortunately Le Sueur had not that attention paid to him that his merit should have commanded, and the characteristics of the French school sank from the chaste style of Le Sueur into a gaudy and violent departure from taste, from which it has not perfectly recovered.

The German school consider Albert Durer (1471—1528) to be the first painter who improved the taste of his countrymen, although the stiffness of his outline, and the deficiencies in grandeur and perspective, are very evident. The superior talent of Hans Holbein (1486—1554) served to correct all these errors, without giving any power to render the school eminent. Holbein was the friend of the illustrious Erasmus, and displayed such knowledge of painting, in the portrait of that great restorer of letters, that he was advised to visit England. In a state of poverty, Holbein is supposed to have presented letters of introduction to

Sir Thomas More, who, perceiving his talent, befriended him by a recommendation to Henry VIII. Holbein painted several portraits of that monarch, who was so gratified, that apartments were appropriated to the painter at Whitehall, and he was brought into great repute among the nobility. One day, having resented an insult, the courtier immediately applied to the king for vengeance. Henry rebuked the nobleman by saying, "I can make seven lords of seven clowns, but I cannot make one Holbein out of seven lords;" and the painter continued to enjoy the patronage of his majesty. Holbein's taste, however, was Gothic. Perhaps from his never having visited Rome—the school of schools—his knowledge of the great principles of the art was very limited. He died of the plague, in London, in the 56th year of his age.

It should be mentioned, that, in the fifteenth century, the arts received a fresh impetus from an accidental discovery by John Van Eyck, who, uniting practical chemistry with a love of painting, made many experiments in varnishing upon distemper or water colours, until he found not only a superior varnish, but that his colours could be mixed with oil, and used with greater facility and effect. This was the desideratum of the Italian masters; and Antoine de Messina travelled to Flanders to obtain the secret. The Flemish school was founded by Van Eyck, otherwise John de Bruges. But Peter Paul Rubens, born at Cologne (1577—1640), was the founder of its reputation. He was by far the most distinguished painter of his time; his facility was equalled by his judgment, and he excelled in every department of the art. He likewise possessed a sprightliness of genius, and a strength of mind, ever ready to burst forth in astonishing efforts of art. His design is dignified, his drawing of anatomy and perspective correct, as his colouring was brilliant; in this particular he was so eminent as to be considered the first among painters who speak to the eye, and this power he carried almost to enchantment. Yet, with such transcendent abilities, he is not to be compared with Raphael in graceful simplicity, nor with Titian in harmony. Rubens preferred the magic of colour to beauty of form; he seems to have been delighted with the splendour of his art and the rapidity of his execution; his colours appear as if made at once to the required tone, and placed by the side of each other with a slight incorporation from the brightest light to the deepest shade, evincing a perfect knowledge of their individual and combined effects. Rubens was a man of fine understanding and a scholar; he had studied the esteemed masters of the Italian schools, and adopted whatever was most agreeable to his taste. In the cathedral of Antwerp there is a picture of the Crucifixion, from the pencil of this celebrated painter, which is esteemed one of the noblest productions of art, particularly for its brilliancy and effect. The great reputation of Rubens caused him to be invited to Paris by Mary de Medicis, consort of Henry IV.; and for this queen he painted a series of magnificent allegorical pictures, illustrative of the principal incidents during her reign. They formed the Luxembourg gallery, and now constitute part of the gallery of the Louvre. The Duke of Buckingham recommended this great painter to the Infanta Isabella of Spain; and in consequence, Rubens was sent, by Philip, ambassador to Charles I. of England, in 1630. After the treaty was concluded, his talents were held in requisition to paint the ceiling of the banqueting-house at Whitehall; and he received the honour of knighthood, with a noble remuneration from the friendly monarch. In addition to his merit as a painter, he possessed all the ornaments and advantages that can render a man valuable in society. He lived in the highest esteem and in princely magnificence, and died at Antwerp in the sixty-third year of his age.

Anthony Vanduyck, a native of Antwerp (1599—1641), the pupil of Rubens, was no less celebrated than his master as an honour to the Flemish school. In the higher departments of the art, Vanduyck was inferior to no artist of his day; in portraiture he excelled all others. He had carefully studied, and profited from the Italian masters so much, as to equal Titian in colouring. On his visit to England, where his reputation had preceded him, he was received into the friendship of Charles I., and knighted, and a considerable pension was granted to him, after which he married an English lady, and lived in splendour. The portraits he painted at first were of the highest order; their merits being appreciated, he became the idol of the nobility, for he infused a grace and truth that were perfectly captivating; but he became affectedly careless in his compositions. On being asked why he did so, he replied, "I have painted a long time for reputation, I now work for my kitchen." Vanduyck, however, was generous and gentlemanly. Unfortunately, while in treaty for making cartoons for the banqueting-house, Whitehall, he died of the gout in London, aged forty-two years.

The Dutch school is not remarkable for productions in the higher order of painting, but very conspicuous in colouring, which is often surprisingly beautiful in its truth. The subjects of this school are chosen without taste, although they are executed with the greatest attention to nature, for whatever is represented seems to be a faithful transcript of the object. Rembrandt, born near Leyden (1606—1668), who owed all to the strength of his genius, formed a style of painting peculiar to himself, and is the most prominent painter of

the Dutch school. There are numerous historical pictures of his distinguished for their very powerful effect, richness, and harmony, but greatly deficient in invention, drawing, and grace. In portraiture he is much esteemed, for he united the truth of nature with the most astonishing effect. No one knew better how to manage his tints; every tone is placed with the greatest precision, and in such harmony as to require no further mingling, by which their freshness might be destroyed. He used colour with such profusion as to cause projections on the canvass or panel that seem absurd, yet, the light catching on them, they produce an increased effect. He is remarkable for the small portion of light on his subject, which is rendered more brilliant by the transparent depth of his half tints and shade. Rembrandt was a man of low pursuits, and appeared happy in the society of the merest boor; and when reproached by his friends for such conduct, he replied, "When I have an inclination to unbend and refresh my mind, I seek not honour so much as liberty." He was a low humorist, with a fine genius, and might have raised himself to honour and opulence, but he died on a level with his wretched associates.

These schools of painting, which, as has been said, depended on the encouragement given to painters in the higher branches of art, with reference to historical and scriptural scenes, have long ceased to exist; although the productions of various painters continue to be referred to those schools, the style of which they have adopted. The decline of encouragement to this elevated style of painting had the effect of introducing a great variety of subjects to the notice of the admiring world, such as domestic scenes, rural assemblages, landscapes, sea-views, buildings, cattle, still-life, and so forth. The painters of these productions acted independently, or after their own peculiar manner; and as they ever repeated the style or character in which they were most successful, great perfection was attained, much to the gratification of those whose tastes and fortunes led them to patronise this department of the fine arts. Of this illustrious series of painters independent of the schools, we shall give some account in a subsequent paper.

VISIT OF AN AMERICAN GENTLEMAN TO THE FIELD OF WATERLOO.

I HAVE just returned from Waterloo. "And what motive had you, now, after the lapse of twenty years, in going to the battle-field of Waterloo?" I must confess I do not certainly know. Perhaps it was because the powers of Europe have been so ungallant as not to fight so great a battle since; and where else could I go? Perhaps it was to gratify an idle and questionable curiosity to see the place where the two greatest captains of the age met, and where so many thousands of brave men fell. Perhaps it was because nobody ever thinks of coming to Brussels without visiting Waterloo. Perhaps it was that I might have something to write and talk about. Perhaps it was that I might be able to say I have been there; just as a gentleman, whom I met the other day in the Pantheon, at Paris, was induced to go down into the tombs of the great men there; and just as travellers go to a thousand other places which they care as little about as he did about Rousseau and Voltaire. Or perhaps it was, that, standing upon the field of battle, I might deepen the abhorrence which I have long felt of war, in all its aspects of slaughter, suffering, and crime.

The distance from Brussels is twelve miles. The road lies, nearly half the way, through a very thick and tall beech forest. At the time of the great battle, it was much more extensive than it is now. Large tracts of it have been recently cleared up; and the process of bringing the land under cultivation, in its various stages, reminded me more of what one every where meets with in the newly settled parts of the United States, than I ever dreamed of seeing in one of the old countries of Europe.

As you come a little nearer to Waterloo, women and children sally out with maps, and plans, and relics. One wants to sell you a bullet, another offers you a grape shot, another a brass eagle, such as the French cavalry wore upon their helmets, another a small piece of a bombshell, and so on. The only relic which I brought away was a piece of charcoal from the ruins of the farm-house of Hugoumont, that was burnt, with many of the wounded, during the engagement. This I value the more, as I feel quite sure it was not manufactured for the occasion.

In some respects the field of Waterloo has undergone considerable changes since the battle. A part of the forest through which Blücher brought his Prussians into the action has been cut down, as has also another small forest on the right wing of the British army, where the battle raged with the most horrible fury and slaughter. But the greatest alteration has been made by the erection of an immense mound, or rather pyramid of earth, very near the British centre. To build this pyramid, which is nearly one-third of a mile in circumference at the base, and about two hundred feet high, the ground has been taken away to the depth of several feet for a great distance, so as to reduce the most commanding point of Wellington's position to a dead level. This, it is said, military men regard as a

kind of sacrilege, which they will not soon forget or forgive.

At first I felt a little inclined to complain of it too; but when I came to ascend to the top of the mound, and to see what a perfect map there lies spread out before you of the whole scene of action, and especially when I came to look eastward and westward, northward and southward, over one of the most fertile and lovely landscapes that ever my eyes beheld, I confess I was glad the pyramid had been raised, even at whatever expense of military taste. Upon the top of the mound is a square stone pillar, or rather a high pedestal, surmounted by an immense lion, resting one foot upon a globe, and presenting a fine appearance, not only from the plain below, but from a great distance in every direction.

Every one who has the heart of a philanthropist within him, will readily conceive, that as I stood over this grave-yard of two mighty armies, and looked first at the ground and then at the place of battle, I was oppressed by such a throng of rushing thoughts as can never be adequately expressed; and that, when I descended from this watch-tower of the field of death, and walked slowly away, I could not help exclaiming, "What is man? What is he in his ambition, in his wrath, in the pride of his power, in his cruelty to his own flesh, and in his contempt of every right principle?" And is that really the very spot on which the most remarkable man of his age staked his diadem, and in the defence of which so many thousands of the bravest of the brave poured out their blood? Is it true history, or is it fable, that I have so often read? How calm and peaceful is every thing now, as if the breath of mortal strife had never caused so much as a leaf to tremble! How bright is that sun which looks down upon it to-day! Did the instruments of death ever intercept those beams? Did the sun of Waterloo ever mourn over the carnage of a great battle? Now, in conscious security, the peasantry are there at their work. The ripening harvest is there, and soon will the reapers be there to gather it in, and return with joy, bringing their sheaves with them. The truth, however, cannot be controverted; for there two mighty armies met, steel to steel. There, flying from rank to rank, went forth the dreadful note of preparation, and the war-horse "paved in the valley, and went on to meet the armed men." There broke forth "the thunder of the captains, and the shouting, and there were the garments rolled in blood." There was the shock of those veterans who had conquered Europe on one side, and those of lion-hearts which, from the cliffs of their own little island, had bidden defiance to the conqueror on the other. There raged, from hour to hour of awful uncertainty, that iron-storm which threatened to beat down every living thing into the dust. There thousands upon thousands fell to rise no more. There the victor in a hundred battles played his last game, for at the close of that day, the star of Napoleon went down "into the blackness of darkness for ever."

"It was a glorious battle!" So said the warrior, so said the politician, so said the moralist and Christian, so said the united voice of Europe and America. I may protest against the decision—still I shall be informed that "it was a glorious victory!" It was glorious to be wounded there, to die there; and to be buried there, was to sleep in the bed of glory. It is thus that mankind fool themselves—fool themselves into their graves—and bequeath an indescribable load of misery to thousands. Kind reader, if you be fond of war as a sport, go visit the field of Waterloo—spend a day in its contemplation—and then tell me what thou thinkest of the principle of wholesale slaughter.

THE DIFFUSION OF LITERATURE.

[From a speech by Lord John Russell.]

WITH the increase in manufactures and commerce, the dissemination of instruction, and the improvement of knowledge, have advanced even in more than equal proportion. Indeed, this is a circumstance which must strike the most careless observer, from the vast increase of books, and the very high prices which are paid for the exercise of literary talents. From the immense distribution of works of every description through the country, one would infer that, as the opportunities of information are thus increased, the education of the lower classes must be enlarged in the same proportion. Being curious to gain some information on the subject, I some time ago applied to an eminent bookseller's house in the city, from which I learned a number of interesting facts. From the firm to which I applied, I learned that their own sale amounted to five millions of volumes in the year; that they employed sixty clerks, paid a sum of £5,500 in advertisements, and gave constant employment to no fewer than two hundred and fifty printers and bookbinders. Another great source of information to the country is the increase of circulating libraries. In the year 1770, there were only four circulating libraries in the metropolis; there are at present one hundred, and about nine hundred more scattered through the country; besides these, there are from one thousand five hundred to two thousand book-clubs distributing about the kingdom large masses of information on history, voyages, and every species of science by which the sum of human knowledge can be improved. Here I may also remark on the increase of periodical works: of these there are two, the Edinburgh and Quarterly Reviews, many articles in which

are written with an ability equal to some of the best original writings of former times, and having a greater circulation than all the periodical works of thirty years ago put together. While so many and such fruitful sources of information are thus open to the higher orders, the means of improving the minds of the poorer classes have advanced at a pace not less rapid or less steady. First came the establishment, about twenty-five years ago, of the Lancasterian schools, which have distributed so widely the blessings of early instruction; and after these followed the no less beneficial system of national schools, which afford to the poor of every class education suitable to their state and condition in life. In addition to those means of improvement, another has been opened, not less advantageous to the poor; I allude to the great facilities which at present exist, of getting the most valuable works at a rate so very cheap, as to bring them within the compass of all. Some time ago, an establishment was commenced by a number of individuals, with a capital of not less than £1,000,000, for the purpose of printing standard works at a cheap rate. By that establishment, the history of Hume, the works of Buffon, the Encyclopedia, and other valuable productions, were sold in small numbers at sixpence each; and by this means, sources of the highest and most useful instruction were placed within the poor man's reach.

In noticing the means which have contributed so much to the mental improvement of the great body of the people, I ought not to omit noticing the very good effects which resulted from the exertions of the Bible Society, the Religious Tract Society, the Society for the Dissemination of Christian Knowledge, and other valuable associations of similar character. Since the commencement of the Bible Society, it has applied the immense sum of £900,000 to the laudable purpose of disseminating the knowledge of the Scriptures. From the Religious Tract Society, not fewer than five millions of tracts are distributed annually, and the Society for Promoting Christian Knowledge distributes one million. These facts will show the rapid strides which have been made by the public in the improvement of general knowledge.

[Since the above speech was delivered, the publication of literary sheets, at a cheap price, has been commenced, and carried the dissemination of instruction to an extent which could not formerly have been believed possible. From our own establishment alone, there are disseminated weekly not less than two tons of printed paper, or upwards of a hundred tons annually; and this is a small amount in comparison with the quantity issued from the houses of our various contemporaries.]

VALUE OF LIFE IN ITALY.

GREAT BRITAIN, and other countries settled by the British race, possess one distinct peculiarity of moral character; and that is, a regard for human life. This marked feeling among the people not only produces personal safety, but personal comfort in no ordinary degree, as well as a due regard for external decency in many of the relations of society. If but a little infant, owned by no one, be found murdered, the officials of the law are instantly on the alert to bring the murderer to justice. In those parts of the Continent of Europe, where human life is not held in so much respect, the people have, naturally, not such a horror of looking upon the bodies of the deceased, and make light of the decencies of sepulture. Disrespect to the bodies of the dead is undoubtedly a sign of an exceedingly low state of public morals—marks a population to be sunk in ignorance, and totally devoid of delicacy of sentiment.

Every one has heard of the little value put upon human life in Italy, but few perhaps are aware of the results of that species of depravity, as exemplified in the disregard for the decencies of private burial, and described by Willis, in his "Pencilings by the Way," a work from which we have already given some quotations. Being at Naples, he visited the public burial place of that populous city, which is situated within a high white wall in the environs. "I had read so many harrowing descriptions of this spot (says he), that my curiosity rose as we drove along in sight of it, and, requesting my friends to set me down, I joined an American of my acquaintance, and we started to visit it together. An old man opened the iron door, and we entered a clean, spacious, and well-paved area, with long rows of iron rings in the heavy slabs of the pavement. Without asking a question, the old man walked across to the farther corner, where stood a moveable lever, and, fastening the chain into the fixture, raised the massive stone cover of a pit. He requested us to stand back for a few minutes to give the effluvia time to escape, and then, sheltering our eyes with our hats, we looked in. You have read, of course, that there are three hundred and sixty-five pits in this place, one of which is opened every day for

the dead of the city. They are thrown in without shroud or coffin, and the pit is sealed up at night for a year. They are thirty or forty feet deep, and each would contain perhaps two hundred bodies. [The writer here omits to mention, that quicklime is poured in over the bodies before closing the pit for the year.]

It was some time before we could distinguish any thing in the darkness of the abyss. Fixing my eyes on one spot, however, the outlines of a body became defined gradually, and in a few minutes, sheltering my eyes completely from the sun above, I could see all the horrors of the scene but too distinctly. Eight corpses, all of grown persons, lay in a confused heap together, as they had been thrown in one after another in the course of the day. The last was a powerfully made grey old man, who had fallen flat on his back, with his right hand lying across and half covering the face of a woman. By his full limbs and chest, and the darker colour of his legs below the knee, he was probably one of the lazzaroni, and had met with a sudden death. His right heel lay on the forehead of a young man, emaciated to the last degree, his chest thrown up as he lay, and his ribs showing like a skeleton covered with a skin. The close black curls of the latter, as his head rested on another body, were in such strong relief that I could have counted them. Off to the right, quite distinct from the heap, lay, in a beautiful attitude, a girl, as well as I could judge, of not more than nineteen or twenty. She had fallen on the pile, and rolled or slid away. Her hair was very long, and covered her left shoulder and bosom; her arm was across her body; and if her mother had laid her down to sleep, she could not have disposed her limbs more decently. The head had fallen a little way to the right, and the feet, which were small even for a lady, were pressed one against the other, as if she were about turning on her side. The sexton said that a young man had come with the body, and was very ill for some time after it was thrown in. We asked him if respectable people were brought here. 'Yes,' he said, 'many. None but the rich would go to the expense of a separate grave for their relations. People were often brought in handsome grave-clothes, but they were always stripped before they were left. The shroud, whenever there was one, was the perquisite of the undertakers.' And thus are flung into this noisome pit, like beasts, the greater part of the population of this vast city—the young and the old, the vicious and the virtuous together, without the decency even of a rag to keep up the distinctions of life! Can human beings thus be thrown away?—men like ourselves—women, children, like our sisters and brothers? I never was so humiliated in my life as by this horrid spectacle. I did not think a man—a felon even, or a leper—what you will, that is guilty or debased—I did not think any thing that had been human could be so recklessly abandoned. Pah! It makes one sick at heart! God grant I may not die at Naples!

While we were recovering from our disgust, the old man lifted the stone from the pit destined to receive the dead of the following day. We looked in. The bottom was strewn with bones, already fleshless and dry. He wished us to see the dead of several previous days, but my stomach was already tried to its utmost. We paid our gratuity, and hurried away. A few steps from the gate, we met a man bearing a coffin on his head. Seeing that we came from the cemetery, he asked us if we wished to look into it. He set it down, and the lid opening with a hinge, we were horror-struck with the sight of seven dead infants! The youngest was at least three months old; the eldest perhaps a year; and they lay heaped together like so many puppies, one or two of them spotted with disease, and all wasted to baby-skeletons. While we were looking at them, six or seven noisy children ran out from a small house at the road-side, and surrounded the coffin. One was a fine girl of twelve years of age, and instead of being at all shocked at the sight, she lifted the whitest of the dead things, and looked at its face very earnestly, loading it with all the tenderest diminutives of the language. The others were busy pointing to those they thought had been prettiest, and none of them betrayed fear or disgust. In answer to a question of my friend about the marks of disease, the man rudely pulled out one by the foot that lay below the rest, and, holding it up to show the marks upon it, tossed it again carelessly into the coffin. He had brought them from the hospital for infants, and they had died that morning. The coffin was worn with use. He shut down the lid, and, lifting it again upon his head, went on to the cemetery, to empty it like so much offal upon the heap we had seen.

I have been struck repeatedly with the little value attached to human life in Italy. I have seen several of these houseless lazzaroni literally dying in the streets, and no one curious enough to look at them. The most dreadful sufferings, the most despairing cries, in the open squares, are passed as unnoticed as the howling of a dog. The day before yesterday, a woman fell in the Toledo, in a fit—frothing at the mouth, and livid with pain; and though the street was so crowded that one could make his way with difficulty, three or four ragged children were the only persons even looking at her. Never a night passes without one or more murders, and it is only heard of because the victims selected are English, and they are missed at their hotels. No such thing is permitted to be published, lest it should frighten away the strangers, upon whom half the city lives; and the assassination of an Italian is really a less circumstance than the

losing of a house-dog in America. When I passed through Rome, the frequency of the robberies and murders in the public streets kept the boldest men at home. A friend of mine, an Englishman, was robbed but a few steps from the hotel in which we both lived, at eight o'clock in the evening; and the master of the hotel was knocked down and robbed the night after."

FRENCH POLITENESS.

[From Mr H. L. Bulwer's Work on France, 1834.]

"Je me recommande à vous" (I recommend myself to your notice) was said to me the other day by an old gentleman dressed in very tattered garments, who was thus soliciting a sou. The old man was a picture: his long grey hairs fell gracefully over his shoulders. Tall—he was so bent forward as to take with a becoming air the position in which he had placed himself. One hand was pressed to his heart, the other held his hat. His voice, soft and plaintive, did not want a certain dignity. In that very attitude, and in that very voice, a nobleman of the ancient régime might have solicited a pension from the Duc de Choiseul in the time of Louis XV. I confess that I was the more struck by the manner of the venerable suppliant from the contrast which it formed with the demeanour of his countrymen in general: for it is rare, now-a-days, I acknowledge, to meet with a Frenchman with the air which Lawrence Sterne was so enchanted with during the first month, and so wearied with at the expiration of the first year, which he spent in France. That look and gesture of the "petit marquis," that sort of studied elegance, which, at first affected by the court, became at last natural to the nation, exist no longer, except among two or three "grand seigneurs" in the Faubourg St Germain, and as many beggars usually to be found on the Boulevards. To ask with grace, to beg with as little self-humility as possible—here, perchance, is the fundamental idea which led, in the two extremes of society, to the same results. But things vicious in their origin are sometimes agreeable in their practice.

"Hail, ye small sweet courtesies of life! far smoother do ye make the road of it—like grace and beauty, which beget inclinations at first sight, 'tis ye who open the door and let the stranger in." I had the Sentimental Journey in my hand; it was open just at this passage, when I landed, not very long ago, on the quay of that town which Horace Walpole tells us caused him more astonishment than any other he had met with in his travels—I mean Calais. "Hail, ye small sweet courtesies of life!" have I often muttered to myself.

You arrive at Paris: how striking the difference between the reception you receive at your hôtel, and that you would find in London! In London, arrive in your carriage!—that I grant is necessary—the landlord meets you at the door, surrounded by his anxious attendants: he bows profoundly when you alight, calls loudly for every thing you want, and seems shocked at the idea of your waiting an instant for the merest trifle you can possibly imagine that you desire. Now try your Paris hôtel. You enter the courtyard: the proprietor, if he happen to be there, receives you with careless indifference, and either accompanies you saunteringly himself, or orders some one to accompany you to the apartment, which, on first seeing you, he determined you should have. It is useless to expect another. If you find any fault with this apartment—if you express any wish that it had this little thing, that it had not that, do not for one moment imagine that your host is likely to say with an eager air, that he will see what can be done—that he would do a great deal to please so respectable a gentleman. In short, do not suppose him for one moment likely to pour forth any of those little civilities with which the lips of your English innkeeper would overflow. On the contrary, be prepared for his lifting up his eyes and shrugging up his shoulders (the shrug is not the courtier-like shrug of antique days), and telling you that the apartment is as you see it—that it is for monsieur that he made up his mind whether he take it or not. A Frenchman was expatiating to me the other day on the admirable manners of the English. "I went," said he, "to the Duke of Devonshire's, dans mon pauvre fiacre: never shall I forget the respect with which a stately gentleman, gorgeously apparelled, opened the creaking door, let down the steps, and—courtesy of very courtesies!—picked, actually picked, the dirty straws of the ignominious vehicle that I descended from, off my shoes and stockings." This occurred to the French gentleman at the Duke of Devonshire's. But let your English gentleman visit a French "grand seigneur!" He enters the ante-chamber from the grand escalier. The servants are at a game of dominos, from which his entrance hardly disturbs them; and fortunate is he if any one conduct him with a careless lazy air to the salon. So, if you go to Boivin's, or if you go to Howell's and James's, with what politeness, with what celerity, with what respect your orders are received at the great man's of Waterloo Place! with what an easy nonchalance you are treated in the Rue de la Paix! All this is quite true; but there are things more shocking than all this.

Our great idea of civility is, that the person who is poor should be exceedingly civil to the person who is wealthy: and this is the difference between the neighbouring nations. Your Frenchman admits no one to be quite his equal: your Englishman worships every one richer than himself as undeniably his superior. Judge us from our servants and our shopkeepers, it is true we are the politest people in the world; the servants who are paid well, and the shopkeepers who sell high, scrape, and cringe, and smile. There is no country where those who have wealth are treated so politely by those to whom it goes; but, at the same time, there is no country where those who are well off live in such cold, and suspicious, and ill-natured, and uncivil terms among themselves.

The rich man who travels in France murmurs at every inn and at every shop; not only is he treated no better for being a rich man, he is treated worse in many places, from the idea, that because he is rich he is likely to give himself airs. But if the lower classes are more rude to the higher classes than with us, the higher classes in France are far less rude to one another. The dandy who did not look at an old acquaintance, or who looked impertinently at a stranger, would have his nose pulled, and his body run through with the small-sword, or damaged by a pistol-bullet, before the evening were well over. Where every man wishes to be higher than he is, there you find people insolent to their fellows, and exacting obsequiousness from their inferiors; where men will allow no one to be superior to themselves, there you see them neither civil to those above them, nor impertinent to those beneath them, nor yet very courteous to those in the same station. The manners, chequered in one country by softness and insolence, are not sufficiently courteous and gentle in the other. Time was in France (it existed in England to a later date) when politeness was thought to consist in placing every one at his ease. A quiet sense of their own dignity rendered persons insensible to the fear of its being momentarily forgotten. Upon these days rested the shadow of a bygone chivalry, which accounted courtesy as one of the virtues. The civility of that epoch, as contrasted with the civility of ours, was not the civility of the domestic or the tradesman, meant to pamper the pride of their employer, but the civility of the noble and the gentleman, meant to elevate the modesty of those who considered themselves in an inferior state. Corrupted by the largeness of an expensive and intriguing court, the "grand seigneur," after the reign of Louis XIV., became over-civil and servile to those above him—beneath the star of the French minister beat the present heart of the British mercer—and softly did the great man smile on those from whom he had any thing to gain. As whatever was taught at Versailles was learnt in the Rue St Denis, when the courtier had the air of a solicitor, every one aped the air of the courtier; and the whole nation with one hand expressing a request, and the other an obligation, might have been taken in the attitude of the graceful old beggar, whose accout made such an impression upon me.

But a new nobility grew up in rivalry to the elder one; and as the positions of society became more complicated and uncertain, a supreme civility to some was seen side by side with a sneering insolence to others—a revolution in manners, which embittered as it hastened the revolution of opinions. Thus, the manners of the French in the time of Louis XVI. had one feature of similarity with ours at present. A monied aristocracy was then rising into power in France, as a monied aristocracy is now rising into power in England. This is the aristocracy which demands obsequious servility, which is jealous and fearful of being treated with disrespect: this is the aristocracy which is haughty, insolent, and susceptible—which dreams of affronts and gives them; this is the aristocracy which measures with an uncertain eye the height of an acquaintance; this is the aristocracy which cuts and sneers; this aristocracy, though the aristocracy of the revolution of July, is now too powerless in France to be more than vulgar in its pretensions. French manners, then, if they are not gracious, are at all events not insolent; while ours, unhappily, testify on one hand the insolence, while they do not on the other represent the talent and the grace of that society which presided over the later suppers of the old régime. We have no Monsieur de Fitz-James, who might be rolled in a gutter all his life, as was said by a beautiful woman of his time, "without ever contracting a spot of dirt!" We have no Monsieur de Narbonne, who stops in the fiercest of a duel to pick up the ruffled rose that had slipped in a careless moment from his lips during the graceful conflict! You see no longer in France that noble air, that "great manner," as it was called, by which the old nobility strove to keep up the distinction between themselves and their worse-born associates to the last, and which of course those associates most assiduously imitated.

That manner is gone: the French, so far from being a polite people at the present day, want that easiness of behaviour which is the first essential to politeness. Every man you meet is occupied with maintaining his dignity, and talks to you of his position. There is an evident effort and struggle, I will not say to appear better than you are, but to appear all that you are, and to allow no person to think that you consider him better than you. Persons, no longer ranked by classes, take each by themselves an individual place in society: they are so many atoms, not forming a congruous or harmonious whole. They are

too apt to strut forward singly, and to say, with a great deal of action and a great deal of emphasis, "I am—nobody."

A RIVAL TO THE KILLARNEY ECHO.—On our passing the Lurlei, near Oberwesel, where there is a remarkably distinct echo, I was told that those joyous youths the *Burschen*, who frequently go up and down the river by the steam-boats, having made it a rule on approaching the Lurlei, to roar out "who is the Burgomaster of Oberwesel," the echo, true to the last sound, repeated "Esel," that is, ass. This so annoyed the worthy magistrate, that he petitioned the king of Prussia, I know not with what success, on the subject.—*My Note Book.*

TO DAFFODILS.

Faire Daffodils, we weep to see
You haste away so soon
As yet the early rising sun
Has not attained his noone:
Stay, stay,
Until the hasting day
Has run
But to the even-song;
And, having pray'd together, we
Will goe with you along.
We have short time to stay as you,
We have as short a spring;
As quick a growth to meet decay,
As you or any thing;
We die
As your hours do, and die
Away.
Like to the summer's raine;
Or as the pearly of morning's dew,
Ne'er to be found againe.

—Robert Herrick, 1633.

A CHAPTER OF SOMES.

Some love the sun, and some the moon,
And some "the deep, deep sea;"
Some build their shies in others' eyes,
And some will stoic be:
Some two-leg'd idlers may be seen
Westward of Temple Bar,
With high-heel'd boots, and low-crown'd hats,
Bush'd whiskers, and cigar.
Some love to range, in search of change—
Some stay at home and die—
Some love to smile life's cares away,
While others love to cry;
Some are won, some sold, some worship gold;
Some rise, while others fall;
Many have hearts composed of stone,
And some no heart at all.
Oh! could I find in life's dark book
One clear unblotted page—
A heart that's warm, an eye that smiles,
Alike in youth or age;
There would I pitch my tent of peace,
By friendship's move together,
And in this world, bad as it is,
I'd wish to live for ever.

—Liberator, Glasgow newspaper.

SCOTTISH INSTITUTION FOR YOUNG LADIES.

In an article respecting this institution, in No. 206, it was stated that to receive pupils quarterly formed no part of the scheme. We are now informed that pupils are received quarterly at the institution, with only this difference from annual pupils, that they pay six instead of five guineas, for their instruction. We are glad further to learn that the institution is advancing rapidly in prosperity, and that the parents of the children have repeatedly expressed their approbation of the plan of the establishment.

HERO IN HUMBLE LIFE.

The following sums have been received since the 14th of September, for James Maxwell, the individual mentioned under the fictitious name of Cochrane, in the article entitled "A Hero in Humble Life," and transmitted to him as an additional tribute of respect for his merits—making in all upwards of £100, which we have been the undersigning means of obtaining for this singularly meritorious person:—

Mr H. F. Black, Newcastle	£ 10 10 6
Governess and pupils, Liverpool	3 10 0
Collected in Ashton-under-Line	10 0 0
Mrs Bradley, Clifton Cottage, Huddersfield	1 0 0
A lady and gentleman, North Devon, L5, less postage	
2s. 4d.	4 17 7 1/2
Amount of subscriptions collected by R. P., Greenock	6 11 0
J. J. and A. M., Macclesfield	2 0 0
Collected in Harling, Norfolk	3 10 0
	£ 31 19 1 1/2

Edinburgh, January 23, 1836.

It is again respectfully stated, that no communications in prose or verse are wanted. Notwithstanding this repeated announcement, the Editors continue to receive pieces unsuitable for their purpose, and for the safety or return of which they cannot hold themselves responsible. No letters are received which are not transmitted free of postage; all which are unpaid being returned to the Post-Office without being opened. The Editors have likewise to mention, that they act upon a rule of in no case inserting answers to correspondents in the Journal, as it is considered that its pages may at all times be better occupied with information of a more interesting nature to general readers.

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